

## REMARKS

In the Final Office Action of October 22, 2007, claims 2-9 and 19 were provisionally rejected on the ground of non-statutory obviousness-type double  
5 patenting as allegedly being unpatentable over claims 2-9 of co-pending Application No. 10/056,096. In addition, claims 2-4 and 19 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 6,114,996 (“Nghiem”) in view of U.S. Patent No. 4,907,006 (“Nishikawa et al.”). Furthermore, claims 5-9 were  
10 rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Nghiem and Nishikawa et al. in further view of U.S. Patent No. 6,002,367 (“Engblom et al.”).

In response, Applicants have amended the independent claim 19 to more clearly distinguish the claimed invention from the cited references of Nghiem and Nishikawa et al. Claim 3 has also been amended. As amended, the independent  
15 claim 19 is not obvious in view of the cited references Nghiem and Nishikawa et al., as explained below. In view of the claim amendments and the following remarks, Applicants respectfully request that the amended independent claim 19, as well as the dependent claims 2-9, be allowed.

20 With respect to the provisional obviousness-type double patenting rejections of claims 2-9 and 19, Applicants note herein that these rejections will be addressed at a later time, assuming that these rejections are still applicable.

### I. Patentability of Amended Independent Claim 19

25 As amended, the independent claim 19 includes the limitation of “*wherein the antenna feed is capacitively coupled to the ground conductor by means of a completely flat conducting plate separate from and opposed to a portion of the ground conductor,*” which is not disclosed in the cited references of Nghiem and  
30 Nishikawa et al. Thus, Applicants respectfully assert that the amended independent claim 19 is not obvious in view of cited references of Nghiem and Nishikawa et al., and request that the amended independent claim 19 be allowed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As stated on page 3 of the Office Action, the cited reference of Nghiem “does not teach that the antenna feed is capacitively coupled to the ground conductor by means of a conducting plate separate from and opposed to a portion of the ground conductor.” However, the Office Action further states that the cited reference of Nishikawa et al. “teaches that the antenna feed is capacitively coupled to the ground conductor by means of a conducting plate (item 5) separate from and opposed to a portion of the ground conductor (see figure 1, and column 2 and lines 59-65, column 4 and lines 43-47).” The Office Action then asserts that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Nishikawa with Nghiem’s antenna to offset a reactance component corresponding to the imaginary part of the impedance of the antenna.”

However, as amended, the independent claim 19 recites “*wherein the antenna feed is capacitively coupled to the ground conductor by means of a completely flat conducting plate separate from and opposed to a portion of the ground conductor.*” The radiator plate 5 in Fig. 1 of Nishikawa et al. is L-shaped, and thus, is not completely flat. Thus, the cited reference of Nishikawa et al. does not disclose “*wherein the antenna feed is capacitively coupled to the ground conductor by means of a completely flat conducting plate separate from and opposed to a portion of the ground conductor,*” as recited in the amended independent claim 19. Consequently, the cited references of Nghiem and Nishikawa et al. even when combined do not teach or suggest all the limitations of the amended independent claim 19. Therefore, the amended independent claim 19 is not obvious in view of the cited references of

Nghiem and Nishikawa et al. As such, Applicants respectfully request that the amended independent claim 19 be allowed.

## II. Patentability of Dependent Claims 2-9

Each of the dependent claims 2-9 depends on the amended independent claim 19. As such, these dependent claims include all the limitations of the amended independent claim 19. Therefore, Applicants submit that these dependent claims are allowable for at least the same reasons as the amended independent claim 19.

Applicants respectfully request reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited.

Respectfully submitted,

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